

Citation

Baggs, J., Silverstein, B., & Foley, M. (2003). Workplace health and safety regulations: Impact of enforcement and consultation on workers' compensation claims rates in Washington State. *American Journal of Industrial Medicine*, 43(5), 483-494.

Highlights

- The study examined the effects of Washington's Occupational Safety & Health Administration (OSHA) State Plan (named WISHA) inspections and consultations on workers' compensation claim rates for employers in Washington State.
- The study used a difference-in-differences model to compare the changes in compensable claim rates for employers that had received WISHA inspections or consultations in the previous year with those that had not received the specific WISHA intervention.
- The study found that WISHA enforcement activity was associated with a statistically significant reduction in workers' compensation claims rates for fixed-site industries (for example, manufacturing) but not nonfixed-site industries (for example, construction).
- The quality of the causal evidence presented in this study is low. This means we are not confident that the relative reductions in the compensable claim rates between employers that experienced WISHA enforcement activities or consultations and employers that did not were attributable to the WISHA enforcement activities or consultations.

OSHA Enforcement Activities and Outcomes

The study examined the effects of WISHA inspections and consultations on workers' compensation claim rates for employers in Washington State. The study analyzed changes in both the annual and quarterly compensable claims rates and examined impacts within fixed-site and nonfixed-site industries.

Features of the Study

The study used a regression model to compare the changes in compensable claim rates for employers that had experienced WISHA enforcement activities or consultations in the previous year with those that had not experienced enforcement activities or consultations. The model included controls for employer size and the compensable claims rate from two years before the enforcement activities and consultations. The study separately examined fixed-site industries (for example, manufacturing) and nonfixed-site industries (for example, construction).

The authors used data from the WISHA Integrated Management Information System for 8,929 accounts in the State Fund employer workers compensation program in state fiscal years (SFYs) 1999 and 2000.

Findings

- The reduction in workers' compensation claims rates for employers in fixed-site industries that received WISHA inspections was 15.5 percent greater than the reduction for employers that did not receive inspections. This difference was statistically significant. The result did not hold for nonfixed-site industries.
- WISHA consultation activity was not associated with statistically significant reductions in the claims rates for fixed-site or nonfixed-site industries.

Considerations for Interpreting the Findings

In SFY 1997—two years before the enforcement activities and inspections, which occurred in SFY 1999—compensable claims rates were almost always higher for employers that later experienced WISHA inspections or consultations than for those that did not experience these events. This suggests that employers that received inspections or consultations could have had more underlying workplace hazards, on average, than employers that were not later inspected. In addition, employers that were inspected had a sharp uptick in claims rates in SFY 1999, which suggests that the change from 1999 to 2000 could reflect mean reversion rather than the effect of inspections. That is, we cannot be confident that any reduction in injury rates after a WISHA activity would not have occurred in the absence of that activity.

Causal Evidence Rating

The quality of the causal evidence presented in this study is low. This means we are not confident that the relative reductions in the compensable claim rates between employers that experienced WISHA enforcement activities or consultations and employers that did not were attributable to the WISHA enforcement activities or consultations. To provide more convincing causal evidence that meets CLEAR criteria, the study could have examined only employers that received inspections at random. This would give us confidence that the differences in outcomes between the employers that were inspected and those that were not were attributable to the inspection and not underlying safety or other factors at the firm.